GO-ING ON WITH GRAPHENE OXIDE

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Graphene oxide (GO) is an elusive but highly fascinating tunable nanostructure [1, 2, 3]. Dispersible in aqueous solutions, it can be easily processed into macroscopic functional materials such as papers, aerogels and thin films for different kinds of applications [1-9]. Equally, it can be used as versatile platform for the formation of functional hybrid optoelectronic materials.

GO-ing on with GO research, we will present our latest findings on the use of GO as unique interface layer [10-12]. We will demonstrate that GO can be employed in a controllable way to enable or block charge transfer in optoelectronic device structures. Emphasis is given on the unique and highly dynamic charge-transfer interface interactions established with conjugated polymers [13,14] facilitating improved thin film operation of interest for optoelectronic device structures.

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